Subject: possible bug in ps conversion when combining tv and contour
Posted by Don Stark on Mon, 21 Jul 1997 07:00:00 GMT
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Hi - I have an image that is the result of combining three elements.
First using the mapping utilities a stereographic projection of the
earth is set up. Then the elevation data is overlayed as a color image
with the tv routine. Lastly, a pressure field is overlayed with the
contour routine -- I've included the code below.

When I display this as an x-windows image, it looks perfect. When I
attempted to convert it to write as a color postscript file the images
no longer overlap correctlyand are scaled differently. It looks like the
tv image is no longer scaled correctly by the map_image and/or map_patch
routines.

Any help on this would be greatly appreciated. Thanks

```
----------------------
;+
;   Postscript output
;-
        Set_Plot, "ps", /interpolate
        Device, filename="temp.ps",/color, bits=8

        map_set,90,0,0, /stereo,/isotropic,limit=[45,-180,90,180]
        openr, unit,
filepath('worldelv.dat',SUB=['examples','data']),/get_lun
        elev = bytarr(360,360) & new_elev = bytarr(360,360)
        readu, unit, elev
        close, unit
        elev = shift(elev,180,0)
        new_elev = map_image(elev,sx,sy,/bilin)
        tv,new_elev,sx,sy

        map_grid, glinestyle=0,glinethick=1,charsize=1.2,
/label,color=255
        contour,temp_field,lon,lat,NLEVELS = 8,/FOLLOW,/overplot,
color=203

      Device, /Close

       end
  ------------------------------------------------------------ -------
                          |                              |
Don Stark                 |          ,/7_                |
```

| /   _`, |
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      (601) 688-4759 fax | ~~~~~~~~~~~" ``~~~~~~~~~~~~~ |
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Subject: Re: possible bug in ps conversion when combining tv and contour
Posted by Robert.M.Candey on Tue, 22 Jul 1997 07:00:00 GMT
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In article <33D3E582.51B6@nrlssc.navy.mil>, Don Stark
<stark@nrlssc.navy.mil> wrote:

```
> Hi - I have an image that is the result of combining three elements.
> First using the mapping utilities a stereographic projection of the
> earth is set up. Then the elevation data is overlayed as a color image
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> When I display this as an x-windows image, it looks perfect. When I
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> ;-
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>        tv,new_elev,sx,sy
>
```

```
>          map_grid, glinestyle=0,glinethick=1,charsize=1.2,
>  /label,color=255
>          contour,temp_field,lon,lat,NLEVELS = 8,/FOLLOW,/overplot,
>  color=203
>
>        Device, /Close
>
>         end
```

I generally use something of the form:

```
;  map_set or plot
  px = !x.window*!d.x_size
  py = !y.window*!d.y_size
  xWinsize = px(1)-px(0)
  yWinsize = py(1)-py(0)
  tv, data, px(0), py(0), xsize=xWinsize, ysize=yWinsize
```

However, map_image will return xsize and ysize for you to use in the call to tv as well. This is because Postscript uses scalable pixels.

--
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Greenbelt, MD 20771 USA 1-301-286-6707